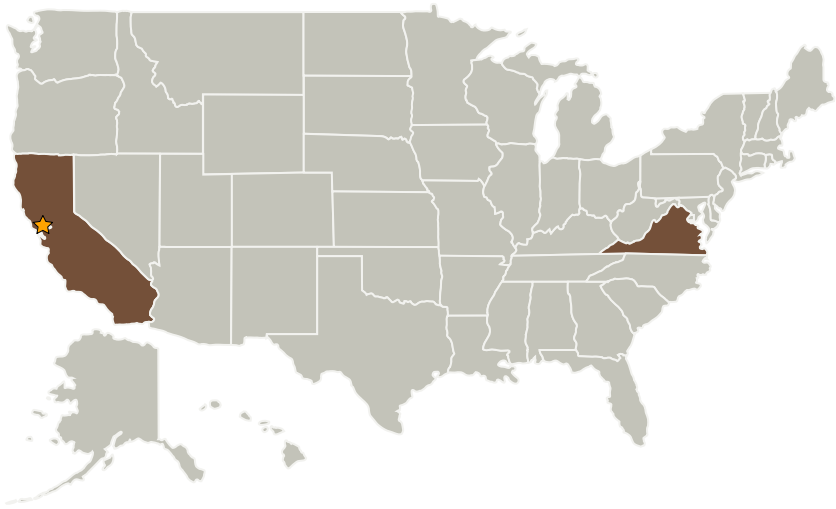
On-Demand Special Use Airspace, Phase I

Completed Technology Project (2008 - 2008)

Project Introduction

We design and develop a Decision Support Tool (DST) that supports On-Demand Special Use Airspace (SUA) scheduling and flight plan optimization around SUA between Airline Operations Control (AOC), Military, Air Traffic Control System Command Center (ATCSCC), and Air Route Traffic Control Center (ARTCC) personnel. The tool allows AOC and ARTCC Traffic Management Unit (TMU) personnel to coordinate strategic and tactical plans, with a strategic look ahead time from days to less than 2 hours, and tactical plans up to the minute centered locally around an ARTCC airspace. The tool coordinates aircraft movement though vs around SUA. The tool allows for asynchronous communication of priorities associated with flight plans and flight plan amendments (contingency plans) between the AOC and ARTCC TMU specialist, allowing the ATCSCC and Military to view these priorities and TMU responses to them at any time. This technology will be developed to Technology Readiness Level (TRL) 2 by the end of Phase I, and TRL 4 prototype system by the end of Phase II.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Ames Research Center(ARC)	Lead Organization	NASA Center	Moffett Field, California
Metron Aviation, Inc.	Supporting Organization	Industry	Dulles, Virginia

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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Ames Research Center (ARC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Primary U.S. Work Locations	
California	Virginia

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

Jimmy Krozel

Technology Areas

Primary:

- TX16 Air Traffic Management and Range Tracking Systems
  - TX16.3 Traffic Management Concepts